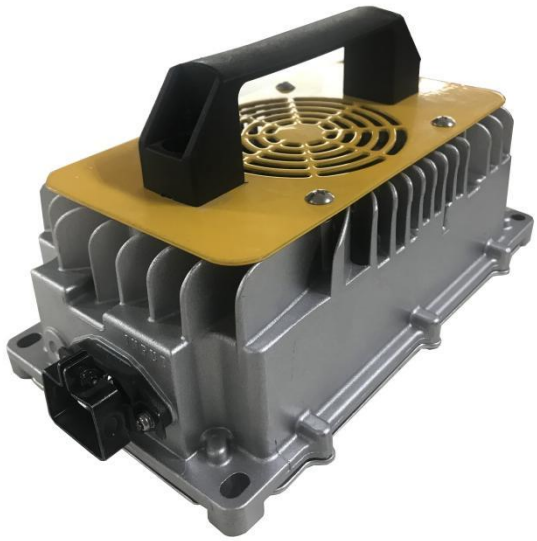
XinYuMing Electronics Co.,Ltd.

SPECIFICATION

Product picture:（XYM1200W）



R&D	Engineer	Confirm	REV.
			1.0

SPECIFICATION	Confirm	Approve	REV.
			1.0

1. General

The series QA1200A,232×137×76mm aluminum shell charger with reverse polarity protection function.

2. Main product specification

型号 Model		☐ QA1250A-2430	☑ QA1250A-3620	☑ QA1250A-4820	☐ QA1250A-6015	☐ QA1250A-7212
Max output voltage	☐ Lead-Acid	29.4V±0.2	44.1V±0.2	59.5V±0.2	73.5V±0.2	88.2V±0.2
	☐ Li-MnO2	29.4V±0.2	54.6V±0.2	54.6V±0.2	84V±0.2	92.4V±0.2
	■ LiFePO4	29.2V±0.2	43.8V±0.2	58.4V±0.2	73.0V±0.2	87. 6V±0.2
Output current		30A±5%	20A±5%	20A±5%	15A±5%	12A±5%
Battery Specifications		8 串	12 串	16串	20串	24 串
Max. output power						
Input voltage		☐90-132Vac ☑180-260Vac ☐100-240V				

3. Environmental condition

No.	Item	Technical specification	Remark
1	Humidity	5~95%	With package
2	Altitude	≤3000m	Work normally

4. Electrical characteristics

4.1 Input characteristic

No.	Item	Technical specification	Remark
1	Rated input voltage	☐110Vac ☑220Vac	
2	Input voltage range	100-240Vac	
3	AC input voltage frequency	50～60 Hz	

4.2 Output characteristic or charge stages

No.	Item		Remark					
1	Nominal voltage		□24V	□36V	□48V	□60V	□72V	
2	(Vout)	□Ni-MH	30V	45V	60V	75V	90V	
		□Li-MnO2	29.4V	42V	54.6V	67.2V	88.2V	
		■LiFePO4	29.2V	43.8V	58.4V	73.0V	87.6V	
	(constant current)		≤Vout	≤Vout	≤Vout	≤Vout	≤Vout	
			20A	20A	20A	15A	15A	
3	(constant voltage)		Vout, 20A↓	Vout, 20A↓	Vout, 20A↓	Vout, 15A↓	Vout, 15A↓	
4	Transition Current		Vout, 3A→0	Vout, 3A→0	Vout, 3A→0	Vout, 2A→0	Vout, 2A→0	10%CC
5	Power efficiency		≥93%	≥93%	≥93%	≥93%	≥93%	enter electric Pressure=220Vac , Ratedload Vin=220Vac,rated load

4.3 Protection characteristics

No.	Item	Technical specification	Remark
1	Software over voltage protection	The charger output voltage does not exceed set the maximum charging voltage of the battery.	
2	Thermal protection	fan	
3	Current limiting protection	The charger output current does not exceed a set battery charge current.	At CC mode
4	Short circuit protection	Short circuit protection should be automatically recovery after remove the condition.	
5	Reverse polarity protection	When output wires are reversely connected to the battery the charger will not operate and will work normally when DC wires are correctly connected.	

6	Precharge	When the positive and negative poles of the charger are successfully connected to the copper pole of the charging pile, the precharge current is 7a and the precharge voltage is 5 Start to enter 10A constant current charging after separation	
7	0V rechargeable	Start charging when the charger receives a voltage above 5V from the equipment	
8	No load no output	Please plug in the charger with 220V AC. If the Positive and Negative poles are correctly connected, the charger will start charging within 10 seconds. If there any unusual circumstance, the charger will stop working.	
9	delayed	After the positive and negative poles of the charger and the positive and negative poles of the equipment are successfully connected, the charging is started after a delay of 2~3 seconds	

4.4 Charging indicator

No.	Item	Status	Remark
1	Power on	LED (RED)OR(GREEN)flash	
2	Charging	LED (RED)flash	
3	Fully charged	LED(GREEN)on always	
4	Charging Voltage Display	NO	
5	Charging Current Display	NO	

5. Safety & EMC

No.	Item		Standard (or test condition)	Remark
1	Electric strength test	Input-output	1500Vac/2s ≤5mA	No breakdown
2	Isolation resistance	Input-ground	≥300MΩ@220Vac	
		Output-ground	≥300MΩ@500Vdc	
3	Leakage current		＜3.5mA	
4	Safety		□CE□RoHs□GS□ETL	
5	EMC		TDB	

		EN55014-2:1997+A1:2001+A2:2008	
6	Low voltage test LVD	EN60335-1:2002+EN60335-2-29:2002	

Remark: Discrimination A- Function OK under technical requirement range;

Discrimination R- Physical damage or failure of equipment are not allowed, but damage of protection device (fuse) caused by interference signal of outside is allowed, and the whole equipment can work normally after replacement of protection device and reset of running parameter

6. Environmental testing requirements

No.	Item	Technical specification	Remark
1	High environmental temperature ambient operating	+40℃	Features OK
2	Low environmental temperature ambient operating	-10℃	Features OK
3	High temperature storage	+70℃	Work normally after recovery under normal temperature for 2 hours
4	Low temperature storage	-40℃	Work normally after recovery under normal temperature for 2 hours
5	Random vibration	20Hz to 500Hz Acceleration 0.49	
6	Repetitive shock	10Hz to 60Hz Amplitude 0.38	
7	Thermal shock	-35℃ to 75℃, ＜ 3min transition, 2.5hours dwell, 200cycle	
8	Drop test	BS EN60068-2-32:1993 TEST ED: free fall appendix B	

7. Mechanical characteristic:

Shell material: Aluminum

Outline dimension:

L*W*H=232×137×76mm

Input socket: meets IEC standard

AC wires: 1.2m length

DC wire: 1.2m length

Net Weight: 2.8Kg

8. Package, transportation & storage

8.1 Package:

There is product name, model, name of manufacturer, safety approval, serial number, User Manual and packing list in the package box.

8.2 Transportation:

Suit for transportation by truck, the products should be Placed in cool dry place, and loaded and unloaded carefully.

8.3 Storage:

Products should be stored in package box when it is not used. And Warehouse extreme temperatures should be -40 ~70 ℃, the normal temperature -20 ~ 50 ℃, and relative humidity is 5~95%. In the warehouse, there should not be harmful gas, inflammable, explosive products, and corrosive chemical products, and strong mechanical vibration, shock and strong magnetic field affection. The package box should be above ground at least 20cm height, and 50cm away from wall, thermal source, and vent. Under this requirement, product has 2 years of storage period, and should be rechecked when over 2 years.

9. Reliability requirements

MTBF（standard, environmental temperature, load requirement） ≥50K hours;

testing condition: 25℃,full load, testing proved value.

10 Product Dimension